

<b>State:</b>	District of Columbia	<b>Filing Company:</b>	Assurity Life Insurance Company
<b>TOI/Sub-TOI:</b>	H07G Group Health - Specified Disease - Limited Benefit/H07G.002A Dread Disease - Cancer Only		
<b>Product Name:</b>	Group Cancer PRO Rate		
<b>Project Name/Number:</b>	Group Cancer PRO /Group Cancer PRO Forms		

## Rate Information

Rate data applies to filing.

<b>Filing Method:</b>	review and approve
<b>Rate Change Type:</b>	Neutral
<b>Overall Percentage of Last Rate Revision:</b>	0.000%
<b>Effective Date of Last Rate Revision:</b>	
<b>Filing Method of Last Filing:</b>	

## Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	# of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Assurity Life Insurance Company	0.000%	0.000%	\$0	0	\$0	0.000%	0.000%

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## Rate/Rule Schedule

Item No.	Schedule Item Status	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments
1		Table 1	G H1225 (DC)/G H1225C (DC); R G1226/R G1226C; R G1227/R G1227C; R G1228 (DC)/R G1228C (DC); R G1229 (DC)/R G1229C (DC)	New		Table 1 - Cancer Group Plan.pdf,

**Table 1**  
**Assurity Life Insurance Company**  
**G H1225/G H1225C Group Cancer Plan Annual Premiums**

	Base Plan - \$150 Daily Hospital Benefit				Base Plan - \$250 Daily Hospital Benefit			
	\$2,500 \$10,000 Chemo/Rad Benefit	\$2,500 \$15,000 Chemo/Rad Benefit	\$5,000 \$20,000 Chemo/Rad Benefit	\$5,000 \$30,000 Chemo/Rad Benefit	\$2,500 \$10,000 Chemo/Rad Benefit	\$2,500 \$15,000 Chemo/Rad Benefit	\$5,000 \$20,000 Chemo/Rad Benefit	\$5,000 \$30,000 Chemo/Rad Benefit
<b>Issue Ages 18-39</b>								
Family	169.55	174.79	198.93	209.42	175.68	180.92	205.06	215.56
Single Parent	110.27	113.15	126.36	132.10	113.74	116.61	129.82	135.57
Employee/Spouse	151.12	155.89	177.84	187.38	156.45	161.22	183.17	192.71
Employee	90.46	92.83	103.76	108.52	93.11	95.48	106.42	111.17
<b>Issue Ages 40-49</b>								
Family	422.14	440.46	524.74	561.37	443.14	461.46	545.73	582.37
Single Parent	236.33	245.78	289.24	308.14	247.28	256.73	300.19	319.09
Employee/Spouse	404.00	421.85	503.96	539.66	424.20	442.06	524.17	559.86
Employee	220.79	229.74	270.89	288.79	230.99	239.94	281.09	298.98
<b>Issue Ages 50-59</b>								
Family	697.29	731.05	886.34	953.85	735.44	769.20	924.49	992.01
Single Parent	369.84	386.89	465.36	499.47	389.19	406.25	484.71	518.83
Employee/Spouse	683.21	716.60	870.22	937.00	720.74	754.14	907.75	974.53
Employee	356.11	372.37	447.19	479.73	374.52	390.79	465.60	498.13
<b>Issue Ages 60-64</b>								
Family	1028.41	1081.45	1325.41	1431.49	1088.22	1141.26	1385.22	1491.29
Single Parent	533.69	560.30	682.68	735.89	563.74	590.35	712.73	765.94
Employee/Spouse	1020.35	1073.18	1316.19	1421.84	1079.80	1132.63	1375.64	1481.28
Employee	516.80	542.00	657.91	708.31	545.31	570.51	686.43	736.82

<b>Issue Ages 65-69</b>								
Family	1234.45	1299.88	1600.88	1731.74	1309.41	1374.84	1675.83	1806.69
Single Parent	632.65	665.36	815.85	881.29	670.12	702.84	853.33	918.76
Employee/Spouse	1234.45	1299.88	1600.88	1731.74	1309.41	1374.84	1675.83	1806.69
Employee	620.74	652.08	796.25	858.93	656.80	688.14	832.31	894.99
<b>Issue Ages 70+</b>								
Family	1486.00	1566.11	1934.66	2094.89	1575.60	1655.74	2024.27	2184.50
Single Parent	758.75	798.81	983.06	1063.20	803.55	843.61	1027.88	1108.00
Employee/Spouse	1486.00	1566.11	1934.66	2094.89	1575.60	1655.74	2024.27	2184.50
Employee	743.40	781.77	958.25	1035.00	786.46	824.83	1001.33	1078.06

	Base Plan - \$350 Daily Hospital Benefit				First Occurrence Rider			
	\$2,500 \$10,000 Chemo/Rad Benefit	\$2,500 \$15,000 Chemo/Rad Benefit	\$5,000 \$20,000 Chemo/Rad Benefit	\$5,000 \$30,000 Chemo/Rad Benefit	R G1226 R G1226C \$2,500 Benefit	R G1226 R G1226C \$5,000 Benefit	R G1226 R G1226C \$7,500 Benefit	R G1226 R G1226C \$10,000 Benefit
<b>Issue Ages 18-39</b>								
Family	181.81	187.06	211.19	221.69	13.14	26.28	39.42	52.56
Single Parent	117.20	120.07	133.28	139.03	7.37	14.74	22.11	29.48
Employee/Spouse	161.78	166.55	188.50	198.04	11.95	23.90	35.85	47.80
Employee	95.76	98.14	109.07	113.82	6.10	12.21	18.31	24.41
<b>Issue Ages 40-49</b>								
Family	464.14	482.46	566.73	603.36	43.34	86.67	130.01	173.34
Single Parent	258.23	267.68	311.14	330.04	23.54	47.08	70.62	94.16
Employee/Spouse	444.41	462.26	544.37	580.07	42.25	84.51	126.76	169.01
Employee	241.19	250.13	291.28	309.18	22.33	44.66	66.99	89.32

<b>Issue Ages 50-59</b>								
Family	773.59	807.35	962.63	1030.16	78.16	156.30	234.46	312.61
Single Parent	408.54	425.60	504.06	538.18	42.02	84.04	126.06	168.08
Employee/Spouse	758.28	791.68	945.28	1012.08	77.35	154.70	232.04	309.39
Employee	392.94	409.20	484.01	516.55	40.15	80.31	120.47	160.62
<b>Issue Ages 60-64</b>								
Family	1148.02	1201.06	1445.02	1551.08	120.95	241.89	362.83	483.78
Single Parent	593.79	620.40	742.78	795.99	64.98	129.97	194.96	259.94
Employee/Spouse	1139.25	1192.08	1435.08	1540.73	120.47	240.93	361.40	481.87
Employee	573.83	599.02	714.94	765.34	61.66	123.32	184.98	246.64
<b>Issue Ages 65-69</b>								
Family	1384.36	1449.79	1750.79	1881.65	142.15	284.29	426.44	568.59
Single Parent	707.60	740.31	890.81	956.23	77.92	155.85	233.78	311.70
Employee/Spouse	1384.36	1449.79	1750.79	1881.65	142.15	284.29	426.44	568.59
Employee	692.86	724.20	868.37	931.05	74.90	149.80	224.70	299.60
<b>Issue Ages 70+</b>								
Family	1665.23	1745.35	2113.88	2274.11	174.86	349.71	524.57	699.43
Single Parent	848.36	888.41	1072.68	1152.80	95.71	191.42	287.14	382.85
Employee/Spouse	1665.23	1745.35	2113.88	2274.11	174.86	349.71	524.57	699.43
Employee	829.53	867.89	1044.39	1121.13	92.05	184.09	276.14	368.19

	First Occurrence Increasing Rider				ICU Rider		Specified Disease Rider
	R G1227 R G1227C \$2,500 Benefit	R G1227 R G1227C \$5,000 Benefit	R G1227 R G1227C \$7,500 Benefit	R G1227 R G1227C \$10,000 Benefit	R G1228 R G1228C \$300 Benefit	R G1228 R G1228C \$600 Benefit	R G1229/R G1229C
<b>Issue Ages 18-39</b>							
Family	29.24	42.37	55.51	68.65	79.61	159.21	7.05
Single Parent	16.39	23.76	31.13	38.50	50.37	100.74	4.08
Employee/Spouse	26.55	38.50	50.45	62.40	55.30	110.60	5.83
Employee	13.55	19.65	25.76	31.86	27.03	54.05	2.89
<b>Issue Ages 40-49</b>							
Family	93.92	137.26	180.59	223.92	83.63	167.25	9.75
Single Parent	50.97	74.51	98.05	121.59	55.38	110.76	5.40
Employee/Spouse	91.47	133.72	175.98	218.23	60.00	120.00	8.56
Employee	48.31	70.64	92.97	115.30	29.72	59.45	4.36
<b>Issue Ages 50-59</b>							
Family	165.01	243.16	321.31	399.47	107.31	214.61	10.10
Single Parent	88.60	130.62	172.65	214.67	60.90	121.81	5.41
Employee/Spouse	163.18	240.53	317.88	395.23	88.92	177.83	9.18
Employee	84.75	124.91	165.07	205.22	43.35	86.69	4.52
<b>Issue Ages 60-64</b>							
Family	247.12	368.07	489.02	609.97	144.32	288.64	13.09
Single Parent	132.59	197.58	262.57	327.55	76.38	152.76	6.74
Employee/Spouse	246.04	366.51	486.98	607.44	133.89	267.79	12.60
Employee	126.23	187.89	249.55	311.21	65.52	131.05	6.05

<b>Issue Ages 65-69</b>							
Family	282.76	424.92	567.06	709.22	184.03	368.07	12.76
Single Parent	154.78	232.71	310.64	388.57	92.02	184.03	6.38
Employee/Spouse	282.76	424.92	567.06	709.22	184.03	368.07	12.76
Employee	149.48	224.38	299.28	374.18	91.36	182.73	6.11
<b>Issue Ages 70+</b>							
Family	339.14	514.00	688.86	863.71	298.45	596.90	15.63
Single Parent	185.58	281.30	377.01	472.72	149.23	298.45	7.81
Employee/Spouse	339.14	514.00	688.86	863.71	298.45	596.90	15.63
Employee	179.48	271.53	363.57	455.62	147.89	295.79	7.48

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<b>Product Name:</b>	Group Cancer PRO Rate		
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## Supporting Document Schedules

<b>Bypassed - Item:</b>	Cover Letter All Filings
<b>Bypass Reason:</b>	N/A
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Certificate of Authority to File
<b>Bypass Reason:</b>	N/A
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Actuarial Memorandum
<b>Comments:</b>	
<b>Attachment(s):</b>	Act Memo - Cancer Group Plan.pdf Table 1 - Cancer Group Plan.pdf Table 2 - Cancer Group Plan.pdf Table 3 - Cancer Group Plan.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Actuarial Justification
<b>Bypass Reason:</b>	N/A
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	District of Columbia and Countrywide Loss Ratio Analysis (P&C)
<b>Bypass Reason:</b>	N/A
<b>Attachment(s):</b>	



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Item Status:	
Status Date:	

Bypassed - Item:	District of Columbia and Countrywide Experience for the Last 5 Years (P&C)
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

Bypassed - Item:	Actuarial Memorandum and Certifications
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

Bypassed - Item:	Unified Rate Review Template
Bypass Reason:	N/A
Attachment(s):	
Item Status:	
Status Date:	

December 21, 2012

**ASSURITY LIFE INSURANCE COMPANY**  
**Actuarial Memorandum – Group Cancer Plan**

<b>Policy Form:</b>	<b>G H1225 and G H1225C</b>
<b>First Occurrence Rider:</b>	<b>R G1226 and R G1226C</b>
<b>First Occurrence Increasing Rider:</b>	<b>R G1227 and R G1227C</b>
<b>Intensive Care Unit Rider:</b>	<b>R G1228 and R G1228C</b>
<b>Specified Disease Rider:</b>	<b>R G1229 and R G1229C</b>

**PURPOSE AND SCOPE**

The purpose of this filing is to demonstrate that the anticipated loss ratio for this new plan and riders to be sold to employees at an employer's worksite meets applicable statutory requirements and to provide documentation of actuarial methods and assumptions used in pricing these plans and riders. This filing may not be appropriate for other purposes.

The attached Table 1 presents sample annual premiums for this plan.

**DESCRIPTION OF BENEFITS**

Policy Form G H1225/G H1225C provides fixed benefits for certain services related to a diagnosis of cancer or cancer screening. Table 2 attached to this memorandum summarizes these benefits.

Rider R G1226/R G1226C provides a lump sum payment of \$2,500, \$5,000, \$7,500 or \$10,000 the first time an insured person has been diagnosed as having cancer after the waiting period. This benefit will be paid once per insured person.

Rider R G1227/R G1227C provides a lump sum payment the first time an insured person has been diagnosed as having cancer. On each anniversary date prior to the diagnosis of cancer, the initial lump sum payment of \$2,500, \$5,000, \$7,500 or \$10,000 will increase by \$500 for a maximum of 10 years. This benefit will be paid once per insured person.

Rider R G1228/R G1228C provides a daily benefit of either \$300 or \$600 for each day an insured person is confined in a hospital intensive care unit, not to exceed 30 days during any one period of confinement. Losses incurred within the 30-day waiting period are not payable.

Rider R G1229/R G1229C provides a hospital confinement benefit of \$150 per day for the first 75 consecutive days and \$300 per day thereafter if any insured person is confined in a hospital for specified disease treatment. This rider also provides \$500 per calendar year for drugs and medicines prescribed by a physician for treatment of a specified disease outside a hospital setting.

Specified Disease means any of the following:

Addison's Disease	Mad Cow Disease	Scarlet Fever
Lou Gehrig's Disease (ALS)	Malaria	Scleroderma
Botulism	Meningitis	Sickle Cell Anemia
Brucellosis	Multiple Sclerosis	Small Pox
Bubonic Plague	Muscular Dystrophy	Systemic Lupus Erythematosus
Budd-Chiari Syndrome	Myasthenia Gravis	Tay-Sachs Disease
Cerebral Palsy	Necrotizing Fasciitis	Tetanus
Cholera	Osteomyelitis	Thalassemia
Cystic-Fibrosis	Polio	Toxic Epidermal Necrolysis
Diphtheria	Primary Biliary Cirrhosis	Toxic Shock Syndrome
Encephalitis	Primary Sclerosing Cholangitis	Trichinosis
Hansen's Disease	Q Fever	Tuberculosis
Hepatitis (chronic B or C with Liver Failure)	Rabies	Tularemia
Histoplasmosis	Reye's Syndrome	Typhoid Fever
Huntington's Chorea	Rheumatic Fever	Whooping Cough
Legionnaires' Disease	Rocky Mountain Spotted Fever	Yellow Fever

#### APPLICABILITY

The sample premiums in this filing are for the policy forms and riders captioned above. These are new policy forms.

#### MORBIDITY BASIS

Claim costs were developed by attained age based on the prescribed benefits and frequencies developed from several sources, including hospital admission rates by diagnosis or operation from Solucient, Inc., several state hospital inpatient and ambulatory databases, organ transplant frequencies from the Milliman research report 2005 US Organ and Tissue Transplantation Cost Estimates and Discussion based on transplant counts from the United Network for Organ Sharing, and Cancer Facts from the American Cancer Society.

Milliman's MG-ALFA pricing and actuarial projection model was used to develop and test gross premiums based on the present values of premiums, expenses, and commissions using a 5.5% annual discount rate.

Exposure adjustments were made to prevent re-exposing someone who is diagnosed with a condition within a benefit category from being exposed to that same condition again. First occurrence rates for invasive cancer and breast cancer were based on 2000 – 2003 Surveillance Epidemiology and End Results (SEER) data. The SEER data is more current than the 1985 NAIC tables and shows higher incidence rates at older ages than the 1985 NAIC tables. At younger ages the 1985 NAIC table incidence rates appear much too high as compared to the historical SEER data over several decades. A comparison of the SEER data to the 1985 NAIC tables is shown in the following table.

Invasive Cancer Incidence Rates per 100,000								
Age	Male				Female			
	1985 NAIC	'73 – '74 SEER	'92 – '93 SEER	'00 – '03 SEER	1985 NAIC	'73 – '74 SEER	'92 – '93 SEER	'00 – '03 SEER
0-14	NA	14.2	14.8	15.8	NA	11.4	13.0	14.1
15-34	59.9	31.1	45.7	40.0	143.3	42.7	48.4	54.0
35-44	141.5	103.5	141.5	117.1	340.6	216.0	209.4	213.8
45-54	404.5	337.7	390.4	391.8	587.1	496.0	494.6	484.5
55-64	992.6	898.0	1,250.7	1,224.9	953.0	849.6	916.6	927.1
65-74	1,882.8	1,868.2	2,926.9	2,567.4	1,270.7	1,161.3	1,475.7	1,501.0
75+	2,450.9	2,896.3	3,893.0	3,263.2	1,532.5	1,510.8	1,909.4	1,941.3

We applied loads to the claim costs that vary by attained age to anticipate adverse selection because of the limited underwriting that accompanies this plan. These loads vary from 63% for ages under 33 to about 9% for ages over 66. The loads were based on cancer plan experience and our judgment.

#### MORTALITY AND PERSISTENCY

Mortality is based on the 2001 VBT table and voluntary lapses are assumed to be 25%, 20%, 16.5%, 13%, 11%, and 10% for policy years 1, 2, 3, 4, 5, and 6+, respectively. At age 65, a 50% decrement is assumed because people may reconsider the need for their coverage due to the presence of Medicare.

#### EXPENSES

- Commissions: 50.0% first year and 10.0% thereafter or 18% level for all years
- Expenses as a Percent of Premium: 4%
- Expenses as a Percent of Claims: 4%
- Expenses Per Policy: \$30 first year, \$15 thereafter increasing at 3% per year

#### MARKETING

This plan and riders will be sold through agents primarily to employees at an employer's worksite.

#### UNDERWRITING

Applicants must answer the company's application questions for the cancer plan coverage to qualify. If an applicant answers yes to a question, the company will not issue coverage. There is no follow up with medical records or other tests. Benefits will not be paid for any expenses incurred providing diagnosis, treatment, or advice concerning a pre-existing condition unless the expenses are for services rendered after this policy has been in force for 12 months from the issue date. No benefits are payable during the first 30 days of coverage under this policy. Because of the lack of follow up to application questions, the assumed impact from underwriting was reflected by using the following underwriting selection factors: 1.00 for all policy years.

#### PREMIUM CLASSES

Premiums vary by age bracket, and contract tier (employee, employee/spouse, single parent, or family). Premiums are based on the issue age of the employee. Actual group premiums may vary from sample premiums based on experience of the group.

## **ISSUE AGE RANGE**

These plans can be issued for life to qualified applicants.

## **AREA FACTORS**

Premium rates for these plans and riders do not vary by area.

## **AVERAGE ANNUAL PREMIUM**

The average annual sample premium per policy is estimated to be \$550.

## **PREMIUM MODALIZATION RULES**

Table 1 shows the applicable sample annual premiums. Other modes of premium are available including, but not limited to, quarterly, semi-annual, monthly, bi-weekly and weekly. There is no surcharge for premium modes other than annual.

## **CLAIM LIABILITY AND RESERVES**

Since these are new plans and riders, there are no claim liabilities and reserves to consider.

## **ACTIVE LIFE RESERVES**

For premium development, policy reserves are based on ultimate claim costs used in pricing, 1980 CSO mortality 50/50 male/female, 4% interest and a two year preliminary term basis. For valuation purposes, reserves at least as great as the statutory minimum basis will be used.

## **NET INVESTMENT EARNINGS RATE**

The annual net investment earnings rate is assumed to be 5.5% in all years. This rate is used to earn interest on unearned premium, active life and claim reserves and as a discount rate to determine present values.

## **TREND ASSUMPTION**

Since the benefits are fixed, no trend assumption was used in claim costs for premium development.

## **MINIMUM LOSS RATIO**

The minimum loss ratio is based on a review of NAIC and state regulations for filing of rates for group cancer forms, which is 60%.

## ANTICIPATED LOSS RATIO

Based on a projection of financial results for the policy forms covered by this memorandum, covering the period from date of issue over the policy lifetime, the anticipated loss ratio is expected to be 63.0%, which will equal or exceed the minimum 60%. Loss ratio as used here means the ratio of the present value of incurred claims to the present value of earned premiums with present values taken over the life of the policy. Table 3 shows anticipated loss ratios by duration for the first 20 policy years.

## DISTRIBUTION OF BUSINESS

Base Policy Issue Age Distribution	Pivotal Age	Distribution
18-39	28	35%
40-49	45	33%
50-59	54	23%
60-64	62	5%
65-69	67	2%
70+	75	2%

Base Plan Distribution	Distribution
\$2,500 / \$10,000 Chemo / Radiation Option	10%
\$2,500 / \$15,000 Chemo / Radiation Option	10%
\$5,000 / \$20,000 Chemo / Radiation Option	10%
\$5,000 / \$30,000 Chemo / Radiation Option	70%

Base Plan Distribution	Distribution
\$150 Daily Hospital Benefit	85%
\$250 Daily Hospital Benefit	10%
\$350 Daily Hospital Benefit	5%

Rider Distribution	Distribution
R G1226/R G1226C (\$2,500)	15%
R G1226/R G1226C (\$5,000)	15%
R G1226/R G1226C (\$7,500)	15%
R G1226/R G1226C (\$10,000)	15%
R G1227/R G1227C (\$2,500)	5%
R G1227/R G1227C (\$5,000)	5%
R G1227/R G1227C (\$7,500)	5%
R G1227/R G1227C (\$10,000)	5%
R G1228/R G1228C (\$300)	25%
R G1228/R G1228C (\$600)	25%
R G1229/R G1229C	75%

Contract Distribution	Distribution
Employee	45%
Employee / Spouse	15%
Single Parent	15%
Family	25%

#### CONTINGENCY AND RISK MARGIN

A 10% of premium contingency and risk margin is assumed.

#### SAMPLE ANNUAL CLAIM COSTS (before underwriting selection)

Base Policy G H1225 Annual Claim Cost \$150 Daily Hospital Benefit \$2,500 per Month \$10,000 Annual Chemotherapy / Radiation Benefit				
Issue Age	Employee	Employee / Spouse	Single Parent	Family
28	25.95	53.23	38.31	64.43
45	84.76	164.58	97.34	178.41
67	346.02	704.22	352.11	704.22

First Occurrence Rider R G1226 Annual Claim Cost (2,500 Benefit)				
Issue Age	Employee	Employee / Spouse	Single Parent	Family
28	2.30	4.65	3.04	5.41
45	9.85	19.26	10.75	20.20
67	47.92	99.85	49.92	99.85

First Occurrence Increasing Rider R G1227 Annual Claim Cost (2,500 Benefit)				
Issue Age	Employee	Employee / Spouse	Single Parent	Family
28	5.17	10.45	6.83	12.17
45	21.74	42.52	23.75	44.65
67	97.21	201.75	100.87	201.75

ICU Rider R G1228 Annual Claim Cost (\$300 Benefit)				
Issue Age	Employee	Employee / Spouse	Single Parent	Family
28	19.42	40.22	34.85	55.05
45	16.49	32.89	31.63	50.77
67	42.88	86.11	43.05	86.11


Specified Disease Rider R G1229 Annual Claim Cost				
Issue Age	Employee	Employee / Spouse	Single Parent	Family
28	1.67	3.38	2.38	4.12
45	2.95	5.74	3.75	6.66
67	3.54	7.38	3.69	7.38

## ACTUARIAL CERTIFICATION

I, Tara D. Benson, am an actuary at Assurity Life Insurance Company, and am a member of the American Academy of Actuaries and meet its Qualification Standards for Statements of Actuarial Opinion.

In my opinion, the benefits provided are reasonable in relation to the premiums charged. Based on a projection of financial results for the policy forms covered by this memorandum, covering the period from date of issue over the policy lifetime, the anticipated loss ratio is expected to be 63.0%, which will equal or exceed the minimum 60%. Loss ratio as used here means the ratio of the present value of incurred claims to the present value of earned premiums with present values taken over the life of the policy.

The actuarial methods, considerations, and analyses used in forming my opinion conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board, which standards form the basis of this statement of opinion.

  
Tara D. Benson, FSA, MAAA

December 21, 2012  
Date

Associate Actuary, Product Management  
Assurity Life Insurance Company



**Table 1**  
**Assurity Life Insurance Company**  
**G H1225/G H1225C Group Cancer Plan Annual Premiums**

	Base Plan - \$150 Daily Hospital Benefit				Base Plan - \$250 Daily Hospital Benefit			
	\$2,500 \$10,000 Chemo/Rad Benefit	\$2,500 \$15,000 Chemo/Rad Benefit	\$5,000 \$20,000 Chemo/Rad Benefit	\$5,000 \$30,000 Chemo/Rad Benefit	\$2,500 \$10,000 Chemo/Rad Benefit	\$2,500 \$15,000 Chemo/Rad Benefit	\$5,000 \$20,000 Chemo/Rad Benefit	\$5,000 \$30,000 Chemo/Rad Benefit
<b>Issue Ages 18-39</b>								
Family	169.55	174.79	198.93	209.42	175.68	180.92	205.06	215.56
Single Parent	110.27	113.15	126.36	132.10	113.74	116.61	129.82	135.57
Employee/Spouse	151.12	155.89	177.84	187.38	156.45	161.22	183.17	192.71
Employee	90.46	92.83	103.76	108.52	93.11	95.48	106.42	111.17
<b>Issue Ages 40-49</b>								
Family	422.14	440.46	524.74	561.37	443.14	461.46	545.73	582.37
Single Parent	236.33	245.78	289.24	308.14	247.28	256.73	300.19	319.09
Employee/Spouse	404.00	421.85	503.96	539.66	424.20	442.06	524.17	559.86
Employee	220.79	229.74	270.89	288.79	230.99	239.94	281.09	298.98
<b>Issue Ages 50-59</b>								
Family	697.29	731.05	886.34	953.85	735.44	769.20	924.49	992.01
Single Parent	369.84	386.89	465.36	499.47	389.19	406.25	484.71	518.83
Employee/Spouse	683.21	716.60	870.22	937.00	720.74	754.14	907.75	974.53
Employee	356.11	372.37	447.19	479.73	374.52	390.79	465.60	498.13
<b>Issue Ages 60-64</b>								
Family	1028.41	1081.45	1325.41	1431.49	1088.22	1141.26	1385.22	1491.29
Single Parent	533.69	560.30	682.68	735.89	563.74	590.35	712.73	765.94
Employee/Spouse	1020.35	1073.18	1316.19	1421.84	1079.80	1132.63	1375.64	1481.28
Employee	516.80	542.00	657.91	708.31	545.31	570.51	686.43	736.82

<b>Issue Ages 65-69</b>								
Family	1234.45	1299.88	1600.88	1731.74	1309.41	1374.84	1675.83	1806.69
Single Parent	632.65	665.36	815.85	881.29	670.12	702.84	853.33	918.76
Employee/Spouse	1234.45	1299.88	1600.88	1731.74	1309.41	1374.84	1675.83	1806.69
Employee	620.74	652.08	796.25	858.93	656.80	688.14	832.31	894.99
<b>Issue Ages 70+</b>								
Family	1486.00	1566.11	1934.66	2094.89	1575.60	1655.74	2024.27	2184.50
Single Parent	758.75	798.81	983.06	1063.20	803.55	843.61	1027.88	1108.00
Employee/Spouse	1486.00	1566.11	1934.66	2094.89	1575.60	1655.74	2024.27	2184.50
Employee	743.40	781.77	958.25	1035.00	786.46	824.83	1001.33	1078.06

	Base Plan - \$350 Daily Hospital Benefit				First Occurrence Rider			
	\$2,500 \$10,000 Chemo/Rad Benefit	\$2,500 \$15,000 Chemo/Rad Benefit	\$5,000 \$20,000 Chemo/Rad Benefit	\$5,000 \$30,000 Chemo/Rad Benefit	R G1226 R G1226C \$2,500 Benefit	R G1226 R G1226C \$5,000 Benefit	R G1226 R G1226C \$7,500 Benefit	R G1226 R G1226C \$10,000 Benefit
<b>Issue Ages 18-39</b>								
Family	181.81	187.06	211.19	221.69	13.14	26.28	39.42	52.56
Single Parent	117.20	120.07	133.28	139.03	7.37	14.74	22.11	29.48
Employee/Spouse	161.78	166.55	188.50	198.04	11.95	23.90	35.85	47.80
Employee	95.76	98.14	109.07	113.82	6.10	12.21	18.31	24.41
<b>Issue Ages 40-49</b>								
Family	464.14	482.46	566.73	603.36	43.34	86.67	130.01	173.34
Single Parent	258.23	267.68	311.14	330.04	23.54	47.08	70.62	94.16
Employee/Spouse	444.41	462.26	544.37	580.07	42.25	84.51	126.76	169.01
Employee	241.19	250.13	291.28	309.18	22.33	44.66	66.99	89.32

<b>Issue Ages 50-59</b>								
Family	773.59	807.35	962.63	1030.16	78.16	156.30	234.46	312.61
Single Parent	408.54	425.60	504.06	538.18	42.02	84.04	126.06	168.08
Employee/Spouse	758.28	791.68	945.28	1012.08	77.35	154.70	232.04	309.39
Employee	392.94	409.20	484.01	516.55	40.15	80.31	120.47	160.62
<b>Issue Ages 60-64</b>								
Family	1148.02	1201.06	1445.02	1551.08	120.95	241.89	362.83	483.78
Single Parent	593.79	620.40	742.78	795.99	64.98	129.97	194.96	259.94
Employee/Spouse	1139.25	1192.08	1435.08	1540.73	120.47	240.93	361.40	481.87
Employee	573.83	599.02	714.94	765.34	61.66	123.32	184.98	246.64
<b>Issue Ages 65-69</b>								
Family	1384.36	1449.79	1750.79	1881.65	142.15	284.29	426.44	568.59
Single Parent	707.60	740.31	890.81	956.23	77.92	155.85	233.78	311.70
Employee/Spouse	1384.36	1449.79	1750.79	1881.65	142.15	284.29	426.44	568.59
Employee	692.86	724.20	868.37	931.05	74.90	149.80	224.70	299.60
<b>Issue Ages 70+</b>								
Family	1665.23	1745.35	2113.88	2274.11	174.86	349.71	524.57	699.43
Single Parent	848.36	888.41	1072.68	1152.80	95.71	191.42	287.14	382.85
Employee/Spouse	1665.23	1745.35	2113.88	2274.11	174.86	349.71	524.57	699.43
Employee	829.53	867.89	1044.39	1121.13	92.05	184.09	276.14	368.19

	First Occurrence Increasing Rider				ICU Rider		Specified Disease Rider
	R G1227 R G1227C \$2,500 Benefit	R G1227 R G1227C \$5,000 Benefit	R G1227 R G1227C \$7,500 Benefit	R G1227 R G1227C \$10,000 Benefit	R G1228 R G1228C \$300 Benefit	R G1228 R G1228C \$600 Benefit	R G1229/R G1229C
<b>Issue Ages 18-39</b>							
Family	29.24	42.37	55.51	68.65	79.61	159.21	7.05
Single Parent	16.39	23.76	31.13	38.50	50.37	100.74	4.08
Employee/Spouse	26.55	38.50	50.45	62.40	55.30	110.60	5.83
Employee	13.55	19.65	25.76	31.86	27.03	54.05	2.89
<b>Issue Ages 40-49</b>							
Family	93.92	137.26	180.59	223.92	83.63	167.25	9.75
Single Parent	50.97	74.51	98.05	121.59	55.38	110.76	5.40
Employee/Spouse	91.47	133.72	175.98	218.23	60.00	120.00	8.56
Employee	48.31	70.64	92.97	115.30	29.72	59.45	4.36
<b>Issue Ages 50-59</b>							
Family	165.01	243.16	321.31	399.47	107.31	214.61	10.10
Single Parent	88.60	130.62	172.65	214.67	60.90	121.81	5.41
Employee/Spouse	163.18	240.53	317.88	395.23	88.92	177.83	9.18
Employee	84.75	124.91	165.07	205.22	43.35	86.69	4.52
<b>Issue Ages 60-64</b>							
Family	247.12	368.07	489.02	609.97	144.32	288.64	13.09
Single Parent	132.59	197.58	262.57	327.55	76.38	152.76	6.74
Employee/Spouse	246.04	366.51	486.98	607.44	133.89	267.79	12.60
Employee	126.23	187.89	249.55	311.21	65.52	131.05	6.05

<b>Issue Ages 65-69</b>							
Family	282.76	424.92	567.06	709.22	184.03	368.07	12.76
Single Parent	154.78	232.71	310.64	388.57	92.02	184.03	6.38
Employee/Spouse	282.76	424.92	567.06	709.22	184.03	368.07	12.76
Employee	149.48	224.38	299.28	374.18	91.36	182.73	6.11
<b>Issue Ages 70+</b>							
Family	339.14	514.00	688.86	863.71	298.45	596.90	15.63
Single Parent	185.58	281.30	377.01	472.72	149.23	298.45	7.81
Employee/Spouse	339.14	514.00	688.86	863.71	298.45	596.90	15.63
Employee	179.48	271.53	363.57	455.62	147.89	295.79	7.48

<b>Table 2</b> <b>Assurity Life Insurance Company</b> <b>Group Cancer Plan G H1225/G H1225C Benefit Summary</b>	
Additional Surgical Opinions	Pays \$200 for a second or third surgical opinion.
Ambulance	Pays \$200 per trip, limited to two trips per confinement.
Anesthesia	Pays 25% of the Surgical Benefit.
Blood and Blood Plasma	Pays \$150 per day, maximum of 30 days per calendar year.
Bone Marrow Transplant for Cancer	Pays \$10,000 once per lifetime per insured person.
Cancer Screening Tests	Pays \$100 per calendar year per insured person for: biopsy for skin cancer; CA 125; CEA; chest x-ray; colonoscopy; flexible sigmoidoscopy; hemocult stool specimen; mammography screening; pap smear; PSA; serum protein electrophoresis; thermography.
Durable Medical Equipment	Pays \$200 per calendar year for a brace or crutches and \$1,000 per calendar year for a hospital bed, respirator or similar mechanical device, or wheelchair.
Experimental Treatment	Pays \$5,000 per calendar year.
Hairpiece	Pays \$150 per lifetime when hair loss is result of cancer treatment.
Home Health Care Services	Pays \$100 per day for services beginning within seven days of release from a covered hospital confinement provided at home by a licensed home health care agency, maximum of 60 days per calendar year.
Hospice Care	Pays \$100 per day for hospice services, lifetime maximum of 120 days.
Hospital Confinement	Pays \$150, \$250 or \$350 per day, up to 75 consecutive days, of hospital confinement for an insured person's treatment of cancer.
Hospital Confinement – Government or Charity	Pays \$200 per day for first 75 consecutive days and \$400 per day thereafter of Government or Charity hospital confinement for an insured person's treatment of cancer.
Lodging	Pays \$60 per day for lodging for either insured person or adult companion when insured person receives specialized covered treatment more than 50 miles from residence.
NCI Consultation	Pays \$500 once per lifetime for consultation at a National Cancer Institute if the consultation leads to or follows a positive diagnosis of cancer.
Outpatient Surgery	Pays \$150, \$250 or \$350 for insured person's outpatient surgery due to cancer (not payable for non-melanoma skin cancer treatment).
Physician's Attendance	Pays \$35 per day for physician in-hospital visits, does not include surgeon visits.
Private Duty Nursing Service	Pays \$100 per day for private duty nursing while confined in a hospital for the treatment of cancer, maximum of 60 days per calendar year.

Positive Diagnosis Test	Pays \$500 once per lifetime for the diagnostic test that leads to a positive diagnosis of cancer within 90 days of such test for an insured person (not payable for non-melanoma skin cancer).
Prosthesis	Pays \$1,000 per prosthetic device, maximum \$2,000 per calendar year.
Prosthesis – External Breast	Pays \$250 for an external breast prosthesis, payable twice per lifetime.
Radiation Treatment, Chemotherapy, Hormone Therapy or Immunotherapy	Pays \$2,500 per month \$10,000 annual or \$2,500 per month \$15,000 annual or \$5,000 per month \$20,000 annual or \$5,000 per month \$30,000 annual for radiation treatment or chemotherapy, hormone therapy or immunotherapy drugs intravenously administered in a clinical setting.
Reconstructive Surgery Benefit	Pays \$3,000 for breast transverse rectus abdominis myocutaneous (TRAM) flap; \$3,000 for deep inferior epigastric perforator (DIEP) flap; \$750 for breast reconstruction; \$300 for breast symmetry; \$750 for facial reconstruction. Breast reconstruction and symmetry procedures payable four times per lifetime; facial reconstruction payable twice per lifetime.
Self-administered Chemotherapy, Hormone Therapy or Immunotherapy	Pays \$300 for each filled prescription subject to a maximum of \$1,200 per calendar month. After benefit is paid in 24 calendar months, the benefit is limited to \$100 per calendar month.
Supportive Drugs and Services	Pays \$500 per calendar year for the following services related to radiation treatment, chemotherapy, hormone therapy, and immunotherapy: professional fees for administering the covered drugs; medical supplies, equipment and solutions; laboratory tests; x-rays, port films, MRIs, scans and ultrasounds; clinical treatment planning, clinical treatment management, medical radiation physics, dosimetry, treatment devices and special services; treatment consultation, planning and office visits; or supportive and protective care drugs.
Skin Cancer (Non-Melanoma)	Pays \$100 for removal of non-melanoma skin cancer.
Surgical	Pays the amount shown in the surgery schedule.
Transportation	For services not available locally (within 50 miles of the insured person's residence), pays \$500 for an insured person or adult companion per trip for common carrier coach fare to the nearest hospital providing the prescribed treatment, two trips per calendar year; or \$.50 per mile for personal automobile expenses in excess of 50 miles one way, not to exceed 700 miles round trip.

The descriptions of benefits in this memorandum are only summaries and are not intended to describe all benefits in full detail. It does not detail policy exclusions, limitations, or other related provisions. See the policy form for a full description.

**Table 3**  
**Assurity Life Insurance Company**  
**Group Cancer Plan G H1225/G H1225C**  
**Durational Loss Ratios Base Policy and Riders**  
**Composite per policy**

<u>Policy Year</u>	<u>Earned Premiums</u>	<u>Incurred Claims</u>	<u>Loss Ratio</u>
1	464,478	228,177	49%
2	354,833	181,488	51%
3	286,641	154,242	54%
4	236,739	134,488	57%
5	200,530	119,606	60%
6	177,633	111,694	63%
7	158,233	104,769	66%
8	140,835	98,258	70%
9	125,252	92,068	74%
10	111,280	86,052	77%
11	98,770	80,496	81%
12	81,446	69,531	85%
13	64,964	58,108	89%
14	57,467	54,058	94%
15	50,788	50,095	99%
16	44,835	46,419	104%
17	39,555	42,941	109%
18	34,854	39,741	114%
19	30,677	36,648	119%
20	26,964	33,708	125%
NPV			
5.5%	Lifetime		63.0%